



DuPont Central Research
and Development



8EHQ-93-12798
INIT 12/23/93

8e
Monsieur
Industrielle
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8EHQ-1293-1279

A

December 21, 1993



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REC'D
OFFICE OF POLLUTION
PREVENTION AND TOXICS
93 DEC 22 PM 2:34

EXPRESS MAIL - RETURN RECEIPT REQUESTED
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Contains No CBI

Document Processing Center (TS-790)
Attention: 8(e) Coordinator
Office of Pollution Prevention and Toxics
U. S. Environmental Protection Agency
401 M Street SW
Washington, D.C. 20460

Dear Coordinator:

This letter is to inform you of the preliminary results of recently conducted acute oral lethality and 2-week inhalation toxicity studies in rats with propanoyl fluoride, 2,3,3,3-tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(heptafluoropropoxy)propoxy]- (CAS No. 2641-34-1).

In the oral study, deaths occurred in male CrI:CD\ rats at dosages of 60 mg/kg of the test substance or greater. Although no deaths occurred at lower dosages (26 or 40 mg/kg), major (approximately 20-30%) weight losses had occurred by study termination.

In the two-week inhalation subchronic study, rats were exposed nose-only to the test substance at concentrations of approximately 5, 50 and 500 ppb for six hours/day, five days/week for two weeks. Although no significant body weight losses were noted in these groups upon animal sacrifice, relative liver weights were 38% and 117% greater than control values in the 50 and 500 ppb groups, respectively. Biochemical analysis of hepatic tissue showed 2- and 5-fold increases in hepatic beta oxidation activity from these groups. Histopathologic evaluation of the liver revealed changes characterized by swollen, eosinophilic hepatocytes which had a granular cytoplasm. Beta oxidation activity and liver morphology in the 5 ppb group were not significantly different from controls.

Based on EPA guidance (1991) for reporting under TSCA Section 8(e), these results appear to be reportable.

Sincerely,

Charles F. Reinhardt

Charles F. Reinhardt, M.D.
Director

CFR/RV:dj
Phone: (302) 366-5285

RECEIVED
1-11-94



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

Dr. Charles F. Reinhardt
E. I. Du Pont De Nemours and Company
Haskell Laboratory for Toxicology and Industrial Medicine
P.O. Box 50, Elkton Road
Newark, Delaware 19714-0050

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

NOV 04 1994

EPA acknowledges the receipt of information submitted by your organization under Section 8(e) of the Toxic Substances Control Act (TSCA). For your reference, copies of the first page(s) of your submission(s) are enclosed and display the TSCA §8(e) Document Control Number (e.g., 8EHQ-00-0000) assigned by EPA to your submission(s). Please cite the assigned 8(e) number when submitting follow-up or supplemental information and refer to the reverse side of this page for "EPA Information Requests".

All TSCA 8(e) submissions are placed in the public files unless confidentiality is claimed according to the procedures outlined in Part X of EPA's TSCA §8(e) policy statement (43 FR 11110, March 16, 1978). Confidential submissions received pursuant to the TSCA §8(e) Compliance Audit Program (CAP) should already contain information supporting confidentiality claims. This information is required and should be submitted if not done so previously. To substantiate claims, submit responses to the questions in the enclosure "Support Information for Confidentiality Claims". This same enclosure is used to support confidentiality claims for non-CAP submissions.

Please address any further correspondence with the Agency related to this TSCA 8(e) submission to:

Document Processing Center (7407)
Attn: TSCA Section 8(e) Coordinator
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
Washington, D.C. 20460-0001

EPA looks forward to continued cooperation with your organization in its ongoing efforts to evaluate and manage potential risks posed by chemicals to health and the environment.

Sincerely,

Terry R. O'Bryan
Terry R. O'Bryan
Risk Analysis Branch

Enclosure

12798 A



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Triage of 8(e) Submissions

Date sent to triage: NOV 17 1994

NON-CAP

CAP

Submission number: 12798A

TSCA Inventory: Y N D

Study type (circle appropriate):

Group 1 - Dick Clements (1 copy total)

ECO AQUATO

Group 2 - Ernie Falke (1 copy total)

ATOX SBTOX SEN w/NEUR

Group 3 - Elizabeth Margosches (1 copy each)

STOX CTOX EPI RTOX GTOX
STOX/ONCO CTOX/ONCO IMMUNO CYTO NEUR

Other (FATE, EXPO, MET, etc.): _____

Notes:

THIS IS THE ORIGINAL 8(e) SUBMISSION; PLEASE REFILE AFTER TRIAGE DATABASE ENTRY

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entire document: <u>0</u> 1 2 pages _____	pages _____
Notes:	
Contractor reviewer: <u>FOR</u>	Date: <u>9/23/94</u>

CECATS/TRIAGE TRACKING DBASE ENTRY FORM

CPCATS DATA: Submission # 1293-12798 SEQ. A

TYPE: INT SUPP FLWP

SUBMITTER NAME: Dupont Central

Research and Development

INFORMATION REQUESTED: FLWP DATE:
 0501 NO INFO REQUESTED
 0502 INFO REQUESTED (TECH)
 0503 INFO REQUESTED (VOL ACTIONS)
 0504 INFO REQUESTED (REPORTING RATIONALE)
 DISPOSITION:
 0639 REFER TO CHEMICAL SCREENING
 0678 CAP NOTICE

VOLUNTARY ACTIONS:
 0401 NO ACTION REPORTED
 0402 STUDIES PLANNED/UNDERWAY
 0403 NOTIFICATION OF WORKER/OTHERS
 0404 LABEL/MSDS CHANGES
 0405 PROCESS/HANDLING CHANGES
 0406 APP/USE DISCONTINUED
 0407 PRODUCTION DISCONTINUED
 0408 CONFIDENTIAL

SUB. DATE: 12/21/93 OTS DATE: 12/23/93 CSB DATE: 01/11/94

CHEMICAL NAME: _____ CAS# 2641-34-1

INFORMATION TYPE:	P F C	INFORMATION TYPE:	P F C	INFORMATION TYPE:	P F C
0201 ONCO (HUMAN)	01 02 04	0216 EPICLIN	01 02 04	0241 IMMUNO (ANIMAL)	01 02 04
0202 ONCO (ANIMAL)	01 02 04	0217 HUMAN EXPOS (PROD CONTAM)	01 02 04	0242 IMMUNO (HUMAN)	01 02 04
0203 CELL TRANS (IN VITRO)	01 02 04	0218 HUMAN EXPOS (ACCIDENTAL)	01 02 04	0243 CHEM/PHYS PROP	01 02 04
0204 MUTA (IN VITRO)	01 02 04	0219 HUMAN EXPOS (MONITORING)	01 02 04	0244 CLASTO (IN VITRO)	01 02 04
0205 MUTA (IN VIVO)	01 02 04	0220 ECO/AQUA TOX	01 02 04	0245 CLASTO (ANIMAL)	01 02 04
0206 REPRO/TERATO (HUMAN)	01 02 04	0221 ENV. OCCC/REL/FATE	01 02 04	0246 CLASTO (HUMAN)	01 02 04
0207 REPRO/TERATO (ANIMAL)	01 02 04	0222 EMER INCI OF ENV CONTAM	01 02 04	0247 DNA DAM/REPAIR	01 02 04
0208 NEURO (HUMAN)	01 02 04	0223 RESPONSE REQEST DELAY	01 02 04	0248 PROD/USE/PROC	01 02 04
0209 NEURO (ANIMAL)	01 02 04	0224 PROD/COMP/CHEM ID	01 02 04	0251 MSDS	01 02 04
0210 ACUTE TOX. (HUMAN)	01 02 04	0225 REPORTING RATIONALE	01 02 04	0299 OTHER	01 02 04
0211 CHR. TOX. (HUMAN)	01 02 04	0226 CONFIDENTIAL	01 02 04		
<u>0212</u> ACUTE TOX. (ANIMAL)	<u>01 02 04</u>	0227 ALLERG (HUMAN)	01 02 04		
<u>0213</u> SUB ACUTE TOX (ANIMAL)	<u>01 02 04</u>	0228 ALLERG (ANIMAL)	01 02 04		
0214 SUB CHRONIC TOX (ANIMAL)	01 02 04	0239 METAB/PHARMACO (ANIMAL)	01 02 04		
0215 CHRONIC TOX (ANIMAL)	01 02 04	0240 METAB/PHARMACO (HUMAN)	01 02 04		

TRIAGE DATA: NON-CBI INVENTORY ONGOING REVIEW SPECIES TOXICOLOGICAL CONCERN: USE: PRODUCTION:

YES (CONTINUE) YES (DROP/REFER) RAT LOW

NO (DROP) NO (CONTINUE) MED

DETERMINE REFER HIGH

COMMENTS: Non-Cap

> <ID NUMBER>

8(e)-12798A

> <TOX CONCERN>

L(SBTOX)/M(ATOX)

> <COMMENT>

ACUTE ORAL TOXICITY IN THE RAT IS OF MEDIUM CONCERN. ONLY A SUMMARY IS GIVEN. DEATHS OCCURRED AT DOSAGES OF 60 MG/KG OF THE TEST SUBSTANCE OR GREATER. ALTHOUGH NO DEATHS OCCURRED AT LOWER DOSAGES

(26 OR 40 MG/KG), MAJOR (APPROXIMATELY 20-30%) WEIGHT LOSSES HAD OCCURRED BY STUDY TERMINATION. SUBACUTE INHALATION TOXICITY IN THE RAT IS OF LOW CONCERN. ANIMALS WERE EXPOSED, NOSE ONLY, TO CONCENTRATIONS OF 5, 50 AND 500 PPM FOR 6 HRS/DAY, 5 DAYS/WEEK FOR TWO WEEKS. THE FOLLOWING OBSERVATIONS WERE MADE IN THE 50 AND 500 PPM GROUPS: BIOCHEMICAL ANALYSIS OF HEPATIC TISSUE SHOWED 2- AND 5-FOLD INCREASES IN HEPATIC BETA OXIDATION ACTIVITY FROM THESE GROUPS. HISTOPATHOLOGIC EVALUATION OF THE LIVER REVEALED CHANGES CHARACTERIZED BY SWOLLEN, EOSINOPHILIC HEPATOCYTES WHICH HAD A GRANULAR CYTOPLASM.